

FILE 'BIOSIS, SCISEARCH, MEDLINE' ENTERED AT 12:49:36 ON 22 AUG 2003

L1 59 S KPV
L2 6 S L1 AND SKIN
L3 1 S L1 AND ANTIFUNGAL
L4 0 S L1 AND DERMAT?
L5 0 S L1 AND EPIDERMIS
L6 0 S L1 AND PRURIT?
L7 0 S L1 AND PSORIATIC
L8 6 S L1 AND SKIN
L9 12 S L1 AND INFLAMMATION
L10 6 DUP REMO L9 (6 DUPLICATES REMOVED)
L11 2 S L1 AND TOPICAL
L12 0 S L1 AND OINTMENT
L13 0 S L1 AND LOTION
L14 9 S L1 AND SURFACE
L15 6 DUP REMO L14 (3 DUPLICATES REMOVED)
L16 0 S L1 AND ARM
L17 0 S L1 AND LEG
L18 0 S L1 AND ABDOMENT
L19 0 S L1 AND ABDOMEN
L20 1822 S ((LIPTON J?)OR(LIPTON, J?))/AU
L21 671 S ((CATANIA A?)OR(CATANIA, A?))/AU
L22 188 S L20 AND L21
L23 83 DUP REMO L22 (105 DUPLICATES REMOVED)
L24 4 S L23 AND KPV
L25 4 S KPV AND GLUCOCORTICOID
L26 2 DUP REMO L25 (2 DUPLICATES REMOVED)

FILE 'USPATFULL' ENTERED AT 13:08:57 ON 22 AUG 2003

L27 55 S KPV
L28 7 S L27 AND TOPICAL
L29 12 S L27 AND SKIN
L30 6 S L29 AND L28

WEST Search History

DATE: Friday, August 22, 2003

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR</i>			
L7	514/18 and L3	1	L7
L6	514/15 and L5	1	L6
L5	514/16 and L4	1	L5
L4	514/14 and L3	1	L4
L3	424/70.21	442	L3
L2	((1/)!IPC.)	7	L2
L1	kpv.clm.	6	L1

END OF SEARCH HISTORY

AN 2002:254854 SCISEARCH

GA The Genuine Article (R) Number: 531ZC

TI Changes in **glucocorticoid** and mineralocorticoid receptors of liver and kidney cytosols after pathologic stress and its regulation in rats

AU Liu D H (Reprint); Su Y P; Zhang W; Lu S F; Ran X Z; Gao J S; Cheng T M

CS Third Mil Med Univ, Inst Combined Injury, Chongqing, Peoples R China (Reprint)

CYA Peoples R China

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DT Article; Journal

LA English

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ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Objective: As effectors, **glucocorticoid** and mineralocorticoid receptors play an important role in pathologic stress. This study was designed to observe the changes in **glucocorticoid** receptor of liver cytosols and mineralocorticoid receptor of kidney cytosols after pathologic stress in rats.

Design: Controlled laboratory study.

Setting: Medical university.

Subjects. Male Wistar rats (weight range, 180-200 g).

Interventions. Rats received a low-degree or heavy-degree immersion scald that covered 10% or 35% total body surface area and were randomly divided to receive either tumor necrosis factor-alpha, interleukin-1beta polyclonal neutralizing antibody, alpha-melanocyte-stimulating hormone, **KPV** peptide (Ac-D-Lys-L-Pro-D-Val), or saline (control). The binding capacity and the apparent dissociation constant of the steroid-binding sites of normal, low-degree, and heavy-degree scalded rats were measured by radio-ligand-binding assay, with [³H]dexamethasone and aldosterone as the ligand, respectively.

Measurements and Main Results: The binding capacity of **glucocorticoid** receptor in hepatic cytosols in rats 12 hrs after heavy-degree scald (208.45 +/- 30.78 fmol/mg of protein) was lower than that of the control group (306.71 +/- 27.96 fmol/mg of protein; $p < .01$). The binding capacity of **glucocorticoid** receptor in hepatic cytosols in rats 12 hrs after low-degree scald (296.64 +/- 16.06 fmol/mg of protein) was not significantly different compared with the control group ($p > .05$). There were two types of mineralocorticoid receptor in kidney cytosols in rats, and their binding capacity and apparent dissociation constant were not identical. The binding capacity of mineralocorticoid receptor in rats 12 hrs after heavy-degree scald (binding capacity 1, 22.40 +/- 5.40 fmol/mg of protein; binding capacity 2, 196.30 +/- 32.50 fmol/mg of protein) was lower than that of the control group (binding capacity 1, 41.60 +/- 7.20 fmol/mg of protein; binding capacity 2, 317.60 +/- 70.00 fmol/mg of protein; $p < .01$). The binding capacity of mineralocorticoid receptor in kidney cytosols in rats 12 hrs after low-degree scald (binding capacity 1, 41.40 +/- 5.00 fmol/mg of protein; binding capacity 2, 314.80 +/- 45.70 fmol/mg of protein) was not significantly different compared with the control group ($p > .05$). The injections of anti-rat tumor necrosis factor-alpha, interleukin-1beta polyclonal neutralizing antibody, alpha-melanocyte-stimulating hormone, and **KPV** peptide (Ac-D-Lys-L-Pro-D-Val) might prevent a reduction in the binding capacity of **glucocorticoid** receptor in hepatic cytosols and mineralocorticoid receptor in kidney cytosols in rats with heavy-degree scald in vivo.

Conclusions. These studies suggest that the **glucocorticoid** receptor of hepatic cytosols and the mineralocorticoid receptor of renal

cytosols decreased in rats with heavy-degree immersion scald and that the injections of anti-rat tumor necrosis factor-alpha, interleukin-1beta polyclonal neutralizing antibody, alpha-melanocyte-stimulating hormone, and KPV peptide might increase the level of glucocorticoid receptor and mineralocorticoid receptor in vivo.